

REMARKS

The Office Action dated October 4, 2004 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 1-24 are pending and under consideration.

REJECTION UNDER 35 U.S.C. § 103:

In the Office Action, at page 2, claims 1-24 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,381,316 to Joyce et al. ("Joyce") and U.S. Patent No. 6,266,401 to Marchbanks et al. ("Marchbanks"). The Office Action took the position that Joyce and Marchbanks disclose all the recitations of claims 1-24. The rejection is traversed and reconsideration is requested.

Independent 1, upon which claims 2-18 and 21-22 depend, recites a method for controlling service provision for customer terminals, used by customers for receiving services, in a telecommunications network including at least one server for offering services to the customers and control means for controlling the provision of services to customers. The method includes the steps of providing a service by transmitting information to the customer terminal and receiving information about service-specific payments in the control means from the customer terminal during delivery of the service. The method also includes the steps of informing the control means of the current price of the service and maintaining at least one control parameter whose value is dependent on at least accumulated charges for the service and accumulated sum of service-specific payments. The method further includes the steps of comparing the value of at least one

of said at least one control parameter to a first threshold and stopping the provision of the service when the value of the control parameter has reached the first threshold.

Claim 19 recites a method for controlling service provision for customer terminals, used by customers for receiving services, in a telecommunications network including at least one server for offering services to the customers, and control means for controlling the provision of services to customers. The method includes the steps of providing a service by transmitting a plurality of information flows to the customer terminal and receiving information about information-flow-specific payments in the control means from the customer terminal during delivery of the service. The method also includes the steps of informing the control means of the current price of the information flows and maintaining for each information flow at least one control parameter whose value is dependent on at least accumulated charges for the information flow and accumulated sum of information-flow-specific payments. The method further includes the steps of comparing, for each information flow, the value of at least one of said at least one control parameter to an information-flow-specific threshold and stopping said plurality of information flows if the control parameter value of at least one of the information flows reaches the threshold corresponding to it.

Claim 20 recites a method for controlling service provision for customer terminals, used by customers for receiving services, in a telecommunications network including at least one server for offering services to the customers and control means for controlling the provision of services to customers. The method includes the steps of providing a

service by transmitting a plurality of information flows to the customer terminal and receiving information about information-flow-specific payments in the control means from the customer terminal during delivery of the service. The method also includes the steps of informing the control means of the current price of the information flows and maintaining for each information flow at least one control parameter whose value is dependent on at least accumulated charges for the information flow and accumulated sum of information-flow-specific payments. The method further includes the steps of comparing, for each information flow, the value of at least one of said at least one control parameter to an information-flow-specific threshold and stopping only a single information flow when the control parameter value of said information flow reaches the corresponding threshold.

Claim 23 recites a system for controlling service provision to customer terminals, used by customers for receiving services, in a telecommunications network including at least one server for offering services to the customer, and control means for controlling the provision of the service to a customer. The system includes a first means for providing services by transmitting information to customer terminals and a second means for receiving information about service-specific payments from customer terminals during delivery of services in the control means. The system also includes a third means for informing the control means of the current price of the service. The control means includes first control means for maintaining for a service at least one control parameter whose value is dependent on at least accumulated charges for the service and

accumulated sum of service-specific payments, comparison means for comparing the value of a control parameter to a first predetermined threshold value and second control means for stopping the provision of the service when the value of the control parameter has reached the first threshold.

As will be discussed below, the cited prior art references of Joyce and Marchbanks fail to disclose or suggest the elements of any of the presently pending claims.

The Office Action correctly recognized that Joyce fails to teach or suggest, “maintaining at least one control parameter whose value is dependent on at least accumulated charges for the service and accumulated sum of service-specific payments,” as recited in independent claim 1.

In turn, Applicants assert that Joyce also fails to teach or suggest, “receiving information about service-specific payments in the control means from the customer terminal during delivery of the service,” as recited in independent claim 1. Specifically, Joyce generally provides that the system described therein has the ability to inform the customer of his/her maximum allowable calling time, connect the call, and to inform a customer when a minimum value threshold approaches. See column 13, lines 8-12. However, information about calling time and threshold value does not teach or suggest information about service-specific payments as recited in independent claim 1.

Further, Joyce does not teach or suggest that service-specific payments information is provided during the delivery of the service. Rather, at the end of the call, the Switch Manager advises the customer of the balance remaining in the account and

presents the customer with the opportunity to make further calls. After the customer terminates a call, the Switch Manager communicates the remaining balance to the Card Manager and the Card Manager updates the account information. See column 16, lines 26-48.

Furthermore, Joyce provides a Billing Module that takes care of the billing aspects of the system. See column 9, lines 5-25. The Billing Module can be a complete billing system which may include a full-function rating engine. The rating engine or rate plan can determine the monetary value of a transaction, the origin of the transaction, the destination of the transaction, the type of transaction, the time of day and/or day of week of the transaction, and provide for tariff setup and configuration information management for wireless networks. The Billing Module can also include rating engines for functionalities such as long distance calling, conferencing, and message mapping. However, nothing in Joyce teaches or suggests that the billing module or the rating engine receives information about service-specific payments from a customer terminal. Although Joyce generally provides that the Billing Module can provide real-time debit or charge of a customer's associated account after adding a service tax related to the transaction, Joyce is silent as to teaching or suggesting during the delivery of the service, information about service-specific payments from the customer terminal may be received.

In addition, Joyce generally describes receiving information about payments to an account (for instance, increasing the balance of the account), where the payments in the

account can be used for paying for any service/call by decrementing the account balance typically at the end of the service/call. However, Joyce et al. does not teach or suggest receiving information about a service-specific payment during the delivery of the service.

Furthermore, as previously indicated, the Office Action recognized that Joyce fails to teach or suggest, “maintaining at least one control parameter whose value is dependent on at least accumulated charges for the service and accumulated sum of service-specific payments,” as recited in independent claim 1. Thus, since Joyce does not teach the recitations of the control parameter, one can only naturally conclude that Joyce also fails to teach or suggest, “comparing the value of at least one of said at least one control parameter to a first threshold, and stopping the provision of the service when the value of the control parameter has reached the first threshold,” as recited in independent claim 1.

The control parameter of the present invention is used to control delivery of a service by comparing the control parameter to a threshold and stopping the service when the control parameter reaches the threshold. In contrast, Joyce provides the ability to inform the customer of his/her maximum allowable calling time, connect the call, and to inform a customer when a minimum value threshold approaches. Contrary to the contentions made in the Office Action, the information in Joyce provided to the customer is not dependent on at least accumulated charges for the service and accumulated sum of service-specific payments as in the present application.

Referring to Marchbanks, this reference generally describes a billing system for telephony networks where customer billing is processed in two separate phases. See

column 3, lines 50-60. The first phase, which may be referred to as call processing, acquires call or usage data from the telephony network 20 and performs a series of edits. The second phase, referred to as invoicing, actual invoices are prepared on the processed call data. See column 3, lines 60-67.

A charges extract module 308, shown in both FIGS. 13 and 15 of Marchbanks, differentiates non-pager related CPE equipment records from company pager equipment records. See column 8, lines 26-39. This level of differentiation is needed to show the appropriate charge description on an invoice report.

An itemization report formatter module 310 provides for the creation of an itemization of charges report. See column 8, lines 49-60. FIGS. 16E-16G illustrate an itemized listing of charges associated with a number of paging units presented on a single composite customer invoice. The charge text description lines in the voucher view for the date and the charge description fields are moved to the invoice report record by the itemization report formatter module 310. Although Marchbanks provides a system where an invoice is generated itemizing charges for services provided, Marchbanks is silent as to teaching or suggesting that the system is able to maintain a control parameter “whose value is dependent on at least accumulated charges for the service and accumulated sum of service-specific payments,” as recited in independent claim 1. Marchbanks does not illustrate in FIGS. 16E-16G or anywhere else in the reference that the charges are accumulated for the services and a sum of service-specific payments are accumulated to then maintain a control parameter.

Marchbanks does not teach or suggest that a control parameter may be compared to a first threshold and used to stop the provision of a service “when the value of the control parameter has reached the first threshold,” as recited in independent claim 1. Applicants respectfully assert that listing different services or providing an itemization report alone does not teach or suggest, “at least one control parameter whose value is dependent on ... accumulated sum of service-specific payments,” as recited in independent claim 1. Further, nothing in Marchbanks teaches or suggests that such itemization report is compared to a first threshold and that the provisions of services are stopped when the value of the itemization report has reached the first threshold.

A CPE view is also included in Marchbanks as part of the itemization report formatter module 310 to enable the module 310 to process customer premise equipment information. See column 8, lines 61-67. In particular, the itemization report formatter module 310 differentiates between non-pager related CPE equipment records and company pager equipment records. This level of differentiation is required in order to include the appropriate text description on the customer invoice report. Once again, Marchbanks is concerned as to generating an invoice report, but fails to teach or suggests, “maintaining at least one control parameter whose value is dependent on at least accumulated charges for the service and accumulated sum of service-specific payments,” as recited in independent claim 1.

Marchbanks, thus, generally describes how to process usage information off-line, after the service has been delivered, simply for formatting invoices. The descriptions

provided in Marchbanks cannot be considered relevant to control delivery of a service. More specifically, Marchbanks cannot be considered to provide any teaching or suggestion of a control parameter for controlling delivery of a service.

In view of the foregoing, Marchbanks does not correct for the deficiencies of Joyce. Specifically, contrary to the contentions made in the Office Action, a combination of Joyce and Marchbanks would fail to teach or suggest, “maintaining at least one control parameter whose value is dependent on at least accumulated charges for the service and accumulated sum of service-specific payments, comparing the value of at least one of said at least one control parameter to a first threshold, and stopping the provision of the service when the value of the control parameter has reached the first threshold,” as recited in independent claim 1.

Furthermore, in the Office Action it is contended that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature itemization report (accumulated charges for the service and accumulated sum of service-specific payments), as taught by Marchbanks, into the Joyce system in order to provide an efficient, enhanced, and simplified billing systems to customers.” See top of page 4 of the Office Action. The Office Action fails to show where in Joyce is there a need to implement the invoice reports of Marchbanks to then obtain efficient, enhanced, and simplified communication system to customers. It appears that the Office Action is improperly rejecting the claims using hindsight. Applicants respectfully assert that using hindsight to combine the cited references is improper. “To support the conclusion that the

claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination. It is to be noted that simplicity and hindsight are not proper criteria for resolving the issue of obviousness.” Ex Parte Clapp, 227 USPQ 972, 973 (B.P.A.I. 1985).

Specifically, the Office Action must explain the reasons that one of ordinary skill in the art would have been motivated to select the reference and to modify such reference to render the claimed invention obvious. For instance, “[r]ejection of patent application for obviousness under 35 USC §103 must be based on evidence comprehended by language of that section, and search for and analysis of prior art includes evidence relevant to finding of whether there is teaching, motivation, or suggestion to select and combine references relied on as evidence of obviousness; factual inquiry whether to combine references must be thorough and searching, based on objective evidence of record.” In re Lee, 61 USPQ2d 1430 (CA FC 2002)

Thus, as pointed out in In re Lee, the record must support motivation, i.e., there must be something in the record pointing out where the recited motivation can be found. In addition, there must be some discussion on how that purported motivation or suggestion is even relevant to the reference being modified.

The outstanding rejection would appear to have taken the teachings of the present invention and applied the same to modify Joyce, as set forth in the Office Action, to then disclose the presently claimed invention. Accordingly, it is respectfully requested that independent claim 1 and related dependent claims be allowed.

Because independent claims 19, 20, and 23 include similar claim features as those recited in independent claim 1, although of different scope, and because the Office Action refers to similar portions of the cited references to reject independent claims 19, 20, and 23, the arguments presented above supporting the patentability of independent claim 1 are incorporated herein to support the patentability of independent claims 19, 20, and 23.

In view of the foregoing, it is respectfully requested that independent claims 1, 19, 20, and 23 and related dependent claims be allowed.

CONCLUSION:


In view of the above, applicant respectfully submits that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicant further submits that the subject matter is more than sufficient to render the claimed invention unobvious to a person of skill in the art. Applicant therefore respectfully requests that each of claims 1-24 be found allowable and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


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